APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,908	12/14/2000	Kaushal Kurapati	US000387	8381

			EXAMINER
24737	7590	04/04/2006	SALCE, JASON P

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ART UNIT	PAPER NUMBER
2623	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/736,908	KURAPATI, KAUSHAL
	Examiner	Art Unit
	Jason P. Salce	2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/19/2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the

fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection.

Since this application is eligible for continued examination under 37 CFR 1.114,

and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the

previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 12/19/2005 has been entered.

Response to Arguments

2.   Applicant's arguments filed 12/19/2005 have been fully considered but

they are not persuasive.

Applicant argues that Rauch and Herz do not disclose counting the

number of times an item is offered. Applicant states on Page 11, Last

Paragraph, *"Rauch similar to Herz, counts a number of times an item is <u>selected</u>*

and does not maintain a count of a number of times an item is <u>offered</u>".

In a television environment for selecting programs, if a viewer selects a

television program, then the program is offered, otherwise, there is no possible

way for the user to select that program. Therefore, since Raunch counts the

number of times an item was <u>selected</u> (topic or program), clearly this is

analogous to counting the number of times an item was <u>offered</u>.

In regards to the previous 101 rejections, in view of the Interim guidelines set for by the Patent Office, all claims are now directed to non-statutory subject matter for the following reasons:

In regards to claims 1-10, the claims simply state a method that is directed to an abstract idea (a mathematical calculation - calculating a score) and there is no tangible result set forth (the result is a number).

Applicant has previously cited AT&T Corp. v. Excel Communications, Inc., stating, "claims drawn to a long-distance telephone billing process containing mathematical algorithms were held to be directed to patentable subject matter because "the claimed process applies the Boolean principle to produce a useful, concrete tangible result without pre-empting other uses of the mathematical principle" MPEP 2106 II (A)".

Claim 1 in the AT&T Corp. v. Excel Communications, Inc. case states, "A method for use in a telecommunications system in which interexchange calls initiated by each subscriber are automatically routed over the facilities of a particular one of a plurality of interexchange carriers associated with that subscriber, said method comprising the steps of:

generating a message record for an interexchange call between an originating subscriber and terminating subscriber, and including, in said message record, a primary interexchange carrier (PIC) indicator having a value which is a function of whether or not the interexchange carrier associated with said terminating subscriber is a predetermined one of said interexchange carriers."

The claim clearly shows a technologically embodied telecommunication system, where interexchange calls are made between an originating and terminating subscriber, and a record is kept with a specific value determining if the terminating subscriber is predetermined or not. Such a system does not represent an abstract idea.

In contrast, the Applicant's method for recommending items by calculating recommendation score and adjusting a value accordingly clearly represents an abstract idea that can be performed with a pencil and paper. The PIC in AT&T was a useful, tangible and concrete result as apposed to applicant's result which is a number calculated from another number using a recommendation equation. Applicant's score is similar to one calculating a distance number from another distance number using the right triangle equation.

In regards to claims 11-22, the claims are directed to the system are also nonstatutory according to the new guidelines. They are also directed to the Math or abstract idea which generates a number (see Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had "no substantial practical application."):

(2) "TANGIBLE RESULT"

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to

a different state or thing. However, the tangible requirement does require that the claim

must recite more than a § 101 judicial exception, in that the process claim must set forth a

practical application of that § 101 judicial exception to produce a real-world result.

Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had "no

substantial practical application."). "[A]n application of a law of nature or mathematical

formula to a … process may well be deserving of patent protection." Diehr, 450 U.S. at

187, 209 USPQ at 8 (emphasis added); see also 21 Corning, 56 U.S. (15 How.) at 268, 14

L.Ed. 683 ("It is for the discovery or invention of some practical method or means of

producing a beneficial result or effect, that a patent is granted").   In other words, the

opposite meaning of "tangible" is "abstract."

Further note section 3 of the interim guidelines:

**3. Determine Whether the Claimed Invention Preempts an Abstract Idea,
Law of Nature, or Natural Phenomenon (§ 101 Judicial Exceptions).**

Even when a claim applies a mathematical formula, for example, as part of a

seemingly patentable process, the examiner must ensure that it does not in reality "seek[]

patent protection for that formula in the abstract." (see Diehr, 450 U.S. at 191, 209 USPQ

at 10). "Phenomena of nature, though just discovered, mental processes, abstract

intellectual concepts are not patentable, as they are the basic tools of scientific and

technological work." (see Benson, 409 U.S. at 67, 175 USPQ at 675). One may not patent

a process that comprises every "substantial practical application" of an abstract idea,

because such a patent "in practical effect would be a patent on the [abstract idea] itself."

(see Benson, 409 U.S. at 71-72, 175 USPQ at 676; cf. Diehr, 450 U.S. at 187, 209 USPQ

at 8 (stressing that the patent applicants in that case did "not seek to pre-empt the use of

[an] equation," but instead sought only to "foreclose from others the use of that equation

in conjunction with all of the other steps in their claimed process"). "To hold otherwise

would allow a competent draftsman to evade the recognized limitations on the type of

subject matter eligible for patent protection." (see Diehr, 450 U.S. at 192, 209 USPQ at

10). Thus, a claim that recites a computer that solely calculates a mathematical formula

(see Benson) or a computer disk that solely stores a mathematical formula is not directed

to the type of subject matter eligible for patent protection. If an examiner determines that

the claimed invention preempts a § 101 judicial exception, the examiner must identify the

abstraction, law of nature, or natural phenomenon and explain why the claim covers

every substantial practical application thereof (see Page 23).

Further note Annex IV of the interim guidelines:

When nonfunctional descriptive material is recorded on some computer-readable

medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no

requisite functionality is present to satisfy the practical application requirement. Merely

claiming nonfunctional descriptive material, i.e., abstract ideas, stored in a computer-

readable medium, in a computer, on an electromagnetic carrier signal does not make it

statutory. See Diehr, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an

algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical

application of the algorithm was in connection with the programming of a general

purpose computer."). Such a result would exalt form over substance. In re Sarkar, 588

F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be

evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

Therefore claims 1-22 are deemed non-statutory under U.S.C. 101 (see rejection below).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3.   Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-10 state a method that is directed to an abstract idea (a mathematical calculation - calculating a score) and there is no tangible result set forth (the result is a number). See arguments above.

Claims 11-22 are directed to the system are also nonstatutory according to the new guidelines. They are also directed to the Math or abstract idea which

generates a number (see Benson, 409 U.S. at 71-72, 175 USPQ at 676-77

(invention ineligible because had "no substantial practical application."). See

arguments above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-22 rejected under 35 U.S.C. 103(a) as being unpatentable over

Herz et al. (U.S. Patent No. 5,758,257) in further view of Rauch et al. (U.S.

Patent No. 5,758,257).

Referring to claim 1, Herz discloses obtaining a list of one or more

available items (see Column 24, Lines 66-67 and Column 25, Lines 1-2 for

downloading a list of programs and Column 21, Lines 15-29 for a sample content

profile).

Herz also discloses obtaining a recommendation score, R, for said one or

more available items (see Column 25, Lines 7-15 for the set-top box containing

preference data in a customer profile and Column 20, Lines 55-65 for a sample

customer profile, which provides more than one recommendation score).

Herz also discloses calculating an adjustment, A, to said recommendation

score, R (one of the scores in the user's customer profile), based on a

consistency with which an item was selected by a user relative to the number of

times the item was offered (see Figure 3 and Column 26, Lines 51-60 for

adjusting the customer profile using a passive monitoring feature (see description

below)). Also note Column 14, Lines 4-7, Column 30, Lines 48-67 and Column

31, Lines 1-14 for how the calculated adjustment is made by passive updating of

the customer profile. Note that the passive updating of the customer profile

consists of adjusting a customer profile to predict the movies he or she watched

(see Column 31, Lines 6-8), therefore the adjustment (values in updated

customer profile) calculated for the recommendation scores (values in initial

customer profile) is based on the consistency with which an item was selected by

a user relative to the number of times the item was offered (user selected the

movie for viewing (see Column 33, Lines 18-20)).

Herz also discloses generating a combined recommendation score, C,

based on said recommendation score, R, and said adjustment, A (see Column

27, Lines 4-6 for recalculating the agreement matrix once the customer profile is

adjusted).

Although Herz discloses calculating the adjustment based on a

consistency, Herz fails to disclose that the consistency is calculated using a

ration of an item being selected by a user relative to the number of times the item

was offered.

Raunch discloses selecting a topic from a plurality of topics and

incrementing a counter that tracks how often a topic is selected (see Column 11,

Line 55 through Column 12, Line 14). Once the counter has been incremented

the topics are ranked in a list, where the mostly frequently displayed topic is ranked at the top and the least frequently displayed topic is displayed last (Column 12, Lines 15-20). The examiner notes that since the list is reordered based on the frequency of a topic selection, the system would inherently have to determine a ratio of the number of times a topic is selected and the number of times the a topic was offered in order to determine the rank in the list. For example, if a user selects sports 9 times out of 10 offerings and selects romance 1 time out of 10 offerings, then sports is ranked higher than romance. Therefore, no ranking could take place without such a determination.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the consistency calculation method, as taught by Herz, using the ratio calculation method, as taught by Raunch, for the purpose of providing a user with efficient selection of television programs to view and record (see Column 4, Lines 21-24 of Raunch).

Referring to claim 2, Herz discloses that the list of one or more items are programs obtained from an electronic program guide (see Column 24, Lines 66-67 and Column 25, Lines 1-2 for the content profile containing electronic program guide information).

Referring to claim 3, Herz discloses that recommendation score, R, is provided by an explicit program recommender (see Column 12, Lines 11-18 for the user explicitly defining a user profile).

Referring to claim 4, Herz discloses that recommendation score, R, is provided by an implicit program recommender (see Column 11, Lines 63-66 for implicitly (based on what the user watches) defining a user profile.

Referring to claim 5, Herz discloses that the recommendation score, R, is defined as a weighted average of individual ratings of program features (see Column 13, Lines 45-49 for providing a customer profile using the average weights of other customers in order to provide a weighted average value in a customer profile). Note that the average weights are only provided for the case where a profile is implicitly defined, therefore the individual (each customer's) ratings of program features (location, demographics, what a custo mer watches) are averaged with other customers to provide the customer profile (which holds multiple recommendation scores) (see Column 11, Lines 26-29 and Lines 65-66).

Referring to claim 6, Herz discloses presenting the combined recommendation score, C, for each of said one or more programs to a user (see Column 45, Lines 50-55 for displaying a user's customer profile and the ability to modify the customer profile if needed). Also note Column 45, Lines 56-67 and Column 46, Lines 1-18 for further discussion of the user interfaced used to view and modify a customer profile (recommendation scores) and agreement matrix values (combined scores).

Referring to claim 7, Herz discloses that the adjustment to said recommendation score, R, does not exceed a predefined value (see Column 19, Lines 53-63 for the variable ac (level of agreement between two profiles)

calculated in the agreement matrix will not exceed 1). The examiner notes that 1

is the highest level of agreement when calculating the agreement matrix,

therefore the adjusted values cannot exceed the predetermined value of 1 (see

Column 21, Lines 35-63 for calculating the adjustment, A, to recommendation

scores, R, and the combined scores, C, and that all of the calculated values do

not exceed 1).

Referring to claims 8-9, see the rejection of claim 1.

Referring to claim 10, see the rejection of claim 2.

Referring to claim 11, see the rejection of claim 1 and note that Herz

discloses a memory for storing computer readable code and a processor

operatively coupled to the memory (see elements 1006 and 1012 in Figure 10).

Referring to claims 12-17, see the rejection of claims 2-7, respectively.

Referring to claims 18-19, see the rejection of claim 11.

Referring to claim 20, see the rejection of claim 12.

Referring to claims 21-22, see the rejection of claim 11.

Conclusion

5.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Jason P. Salce whose telephone number is

(571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax

phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free).

Jason P Salce
Patent Examiner
Art Unit 2623

March 27, 2006